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	Application No.	Applicant(s)	<u>-</u>
	10/688,417	NAJAFI ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Alonzo Chambliss	2814	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.			
1. This communication is responsive to the drawing replacement sheet filed on 2/28/06.			
2.  The allowed claim(s) is/are <u>1-12 and 14-40</u> .			
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority unerstanding a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority documents.</li> </ul>	been received. been received in Application No	·	on from the
<ol> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol>			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF			
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.			
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.			
(a) $\square$ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached			
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).			
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.			
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Attachment(s)			
1. Notice of References Cited (PTO-892)	5. Notice of Informal P	atent Application (PTO	-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary		
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0-Paper No./Mail Date	Paper No./Mail Date 8), 7. ⊠ Examiner's Amendm	e nent/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's Stateme  9. □ Other	nt of Reasons for Allow	/ance

### **DETAILED ACTION**

1. The amendment filed on 11/21/05 has been fully considered and made of record in the application.

## Drawings

2. The replacement sheets filed on 11/21/05 and 2/28/06 have been approved by the examiner.

## **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy J. Marsh on May 9, 2006.

The application has been amended as follows:

### IN CLAIMS:

In claim 1, line 3, after "comprising: "insert -- providing a substrate having a first and second side; partially forming at least one hole in the first side of the substrate; --;

In claim 1, line 6, delete "forming at least one hole completely through the substrate between first and second sides of the substrate after the step of providing";

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In claim 1, line 9, delete "before the step of forming the at least one hole; and " and insert instead – finish forming the at least one hole completely through the substrate between the first and second sides of the substrate after the step of removing; and --;

In claim 7, line 2, after "providing" insert -- a micromachined or MEMS device --;
In claim 7, lines 3 and 4, delete "and wherein the step of forming may include the step of partially forming the at least one hole from the first side before the step of bonding";

In claim 8, line 2, before "forming" insert -- finish --.

# Allowable Subject Matter

4. Ma et al. (US 6,673,697) and Najafi et al. (US 6,338,284) both failed to disclose partially forming at least one hole in the first side of the substrate.

The following is a statement of reason for the indication of allowance subject matter: the prior art of record does not teach or suggest the combination partially forming at least one hole in the first side of the substrate and removing material from the second side of the substrate to thin the substrate to finish forming the hole completely along with the other limitations in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning the communication or earlier communications from the examiner should be directed to Alonzo Chambliss whose telephone number is (571) 272-1927.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-7956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system see http://pair-dkect.uspto.gov. Should you have questions on access to the Private PMR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC\_Support@uspto.gov.

**AC**/May 9, 2006

Alonzo Chambliss Primary Patent Examiner

Art Unit 2814

Application Serial No. 10/688,417
Reply to Office Action of August 23, 2005
Replacement Sheet



PARTIALLY FORMING AT LEAST ONE
HOLE IN A FIRST SIDE OF A
SUBSTRATE SUCH AS BY REMOVING
MATERIAL FROM THE SUBSTRATE TO
FORM AT LEAST ONE RECESS IN THE
FIRST SIDE

BONDING A WAFER TO THE SUBSTRATE TO OBTAIN A DEVICE SUBSTRATE

BONDING A CAPSULE TO THE DEVICE SUBSTRATE

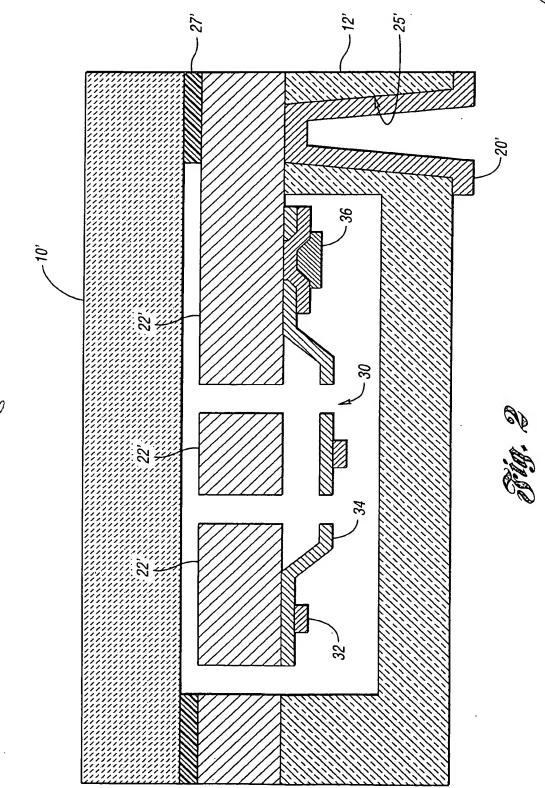
THINNING THE SUBSTRATE DOWN BY REMOVING MATERIAL FROM THE SECOND SIDE OF THE SUBSTRATE SUCH AS BY ETCHING THE SUBSTRATE AT THE SECOND SIDE

FINISH FORMING THE AT LEAST ONE HOLE COMPLETELY THROUGH THE SUBSTRATE BETWEEN THE FIRST AND SECOND SIDES

Approved
3/8/00



2/2



Approved 5/8/06